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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/658,658

09/08/2000

Michael James McLaughlin JR.

50277-0357

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03/10/2005

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EXAMINER

DINH, DUNG C

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/658,658

Applicant(s)

MCLAUGHLIN, MICHAEL JAMES

Examiner

Dung Dinh

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/28/05, 8/16/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2152

DETAILED ACTION

Acknowledgement is made to a claim of priority to provisional application 60/153,464 filed 09/09/1999.

Response to Arguments

Applicant asserted that the material disclosed in the "Background of the Invention" on pages 25-26 under the subsection heading "Transaction Quantum" is not prior art. The disclosed information concerning transaction over the Internet and lengthening of timeout period disclosed on pages 25-26 are relevant to the patentability determination. Applicant is requested to provide information pursuant to 37 CFR 105 set forth below.

Concerning the argument that it is not obvious to apply Sharma teaching to a timeout to terminate distributed transaction, the argument is not persuasive because the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

Art Unit: 2152

1981). Sharma discloses the problem associated with a fixed timeout value in network communication. Sharma teaches to take into account the network latency. Sharma teaches to dynamically adjust the timeout value taking the network's condition into account. (See paragraph one of the Abstract). Hence, it would have been obvious for one of ordinary skill in the art to apply Sharma teaching to any network related art involving the setting of timeout values, including timeout to regulate distributed transactions.

37 C.F.R 105 - Requirements for Information

In response to this requirement, please provide answers to each of the following interrogatories eliciting factual information:

1. Please identify and provide information, including any documents, articles and products, used to make the assertions stated on pages 25-26 of the specification concerning the complex issue of recovery and rebroadcast of transaction across the Internet and the quantum values specified timeout values associated with transaction acknowledgements over the Internet.
2. Please identify and provide information, including earliest date known by the inventors, concerning the quantum value

Art Unit: 2152

that specifies timeout period associated with transaction acknowledgement over the Internet stated on page 26 of the specification.

3. Please identify and provide information, including earliest date known by the inventors, about lengthening the quantum value that specifies a timeout period stated on page 26 of the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen US patent 6,209,038 and further in view of Sharma et al. "Scalable Timers for Soft State Protocols" and Xia US patent 6,154,849.

As per claims 1-5, Bowen teaches a system for distributed transaction over the Internet using stateless protocol (HTTP) [see

Art Unit: 2152

col.1 lines 40-60, col.4 lines 47-60], terminating based on value from one or more fixed time periods (timeout) [col.5 lines 49-55], and having a coordinator cooperates with the participant to execute the transaction by communicating messages with the participant over the network [col.4 lines 60-65]. Bowen does not teach adjusting the timeout period values based on gathered network latency information.

In similar art, Xia teaches that timeout values for transaction server can be adjusted to take into account of the server load condition when it satisfies an adjustment criteria (median load) [see col.8 lines 1-15]. Xia does not specifically disclose taking into account the network latency.

Sharma teaches an improved method over fixed timeout periods for communication sessions over the Internet by adjusting timeout value based on gathered information about network latency comprising:

gathering latency information to generate one or more time period values [p.222 top of col.2 "Scalable timers replace the fixed time settings ... with timers that adapt to the volume ... and available bandwidth"];

determining whether to terminate a session based on one or more of the time period values [see p.222 col.1 and p.223 col.1 2nd paragraph, p.224 col.2 "Timing out network state"].

Art Unit: 2152

Hence, given the teaching of Xia and Sharma, it would have been obvious for one of ordinary skill in the art to modified the fixed timeout values in Bowen with dynamically adjusted timeout values based on various conditions including network latency, server load, etc. because it would have improved the performance of the system and prevent premature transaction failures.

As per claim 6 and 7, Sharma does not disclose setting the time period value based on time period when a message is transmitted and an acknowledgement for the message is received. However, it would have been obvious for one of ordinary skill in the art in to set the time values based at least on the round trip time so as to ensure an adequate minimum timeout value.

As per claim 8, it would have been obvious for one of ordinary skill in the art to generate at least two transmit times because it would have enable redundancy and statistically valid measurement of the transit time.

As per claim 9, Sharma does not disclose pinging a server. It is well known in the network communication art to measure transmit time by pinging the other node. Hence, it would have been obvious for one of ordinary skill in the art to measure transit time to a server by pinging that server.

As per claim 10, Xia teaches determining a transaction execution threshold (server load). It would have been obvious for

Art Unit: 2152

one of ordinary skill in the art to take into account the time needed for a participant to execute operations for a transaction in computing the timeout values so to set adequate minimum response time values.

As per claim 11, the recited limitation is inherent in the operation of the system as modified. It would have been obvious for one of ordinary skill in the art to check for termination criteria of a preceding transaction prior to permitting modification by a second transaction so as to reduce data corruption.

As per claims 12-14 and 19, they are rejected under similar rationale as for claims 1-5 above. Xia and Sharma do not specifically teach adjusting the time period based on the transaction execution period. However, given the teaching of Xia and Sharma as a whole to dynamically adjust the time out values instead of using fixed values. One of ordinary skill in the art would have been motivated to take into account the execution time of transaction operation in calculating the time period values in order to assure a minimum time adequate for a participant to receive, to execute, and to return the result/acknowledgement.

As per claims 15 and 20, it is rejected under similar rationale as for claims 1-5 above. It is apparent from Sharma

Art Unit: 2152

teaching that that changes in latency (changes traffic or bandwidth) would cause adjustment to the timeout values.

As per claims 16-18, they are rejected under similar rationale as for claims 1-5 above.

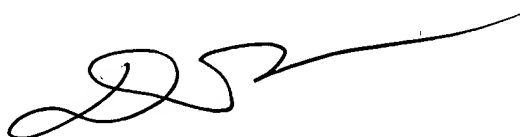
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM. The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached at (703) 305-4792.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dung Dinh
Primary Examiner
March 6, 2005